



# PolyWorks Inspector™

PROBING PACKAGE

## The Universal 3D Metrology Software Platform for Single-Point Probing Devices

**Operate all your probing devices from a common software platform**

Supports major brands of articulated arms, optically-tracked handheld devices, laser trackers, industrial theodolites, and manual CMMs.





## Implement repeatable operator-driven measurement workflows

- Guide operators to probe specific locations on features
- Add guiding instructions or images to measurement objects
  - Use the Play Inspection tool to automatically guide the measurement of additional pieces with a step-by-step sequence

## Enhance your measurement productivity on the shop floor

- Quickly create updatable inspection reports by choosing geometry controls from the measurement database and customizing the display style and content of report items
- Control PolyWorks® remotely and get live feedback while measuring a part using the PolyWorks|Talisman™ mobile app
- Invoke all typical measurement commands by talking to PolyWorks



# Key features

**Universal digitizing hub** that interfaces with arm-based and hand-held probing devices, photogrammetry-based devices, laser trackers and manual CMMs, and includes all 3D metrology device plug-ins at no additional cost.

**Universal workflow** for performing all inspection tasks.

**Parametric, traceable, and updatable solution** that automatically records the operator's intent and ensures changes made to inspection projects are automatically propagated to all the project's 3D geometry and reports.

**Integrated Play Inspection measurement tool** to automatically measure a new piece without teaching or scripting.

**Best-in-class management of multiple device positions** with automatic probed-target matching, target analysis toolbox, bundle adjustment, and temperature compensation.

**Powerful set of data-to-CAD alignment techniques** that include techniques based on probed features, probed reference points, probed surface points, surface and cross-sectional best-fit, and more.

**Multiple coordinate systems and part alignments.**

**Widest range of dimensional control tools on the market** for a complete analysis of surface, boundary, and cross-sectional deviations, feature dimensions, flush and gap, profile radius, airfoil dimensions, and more.

**GD&T™ engine** based on algorithms prescribed by the ASME and ISO standards, advanced Datum Reference Frame capabilities (supports datum feature patterns, composite datum features, and datum targets), tolerance zone and datum modifiers, radial and slab-like tolerance zones, and more.

**Build/Inspect mode** for measurement-driven assembly that offers 3D or X, Y, Z tolerancing on individual objects, visual and audio guidance, autodetect and specific object-building modes, and more.

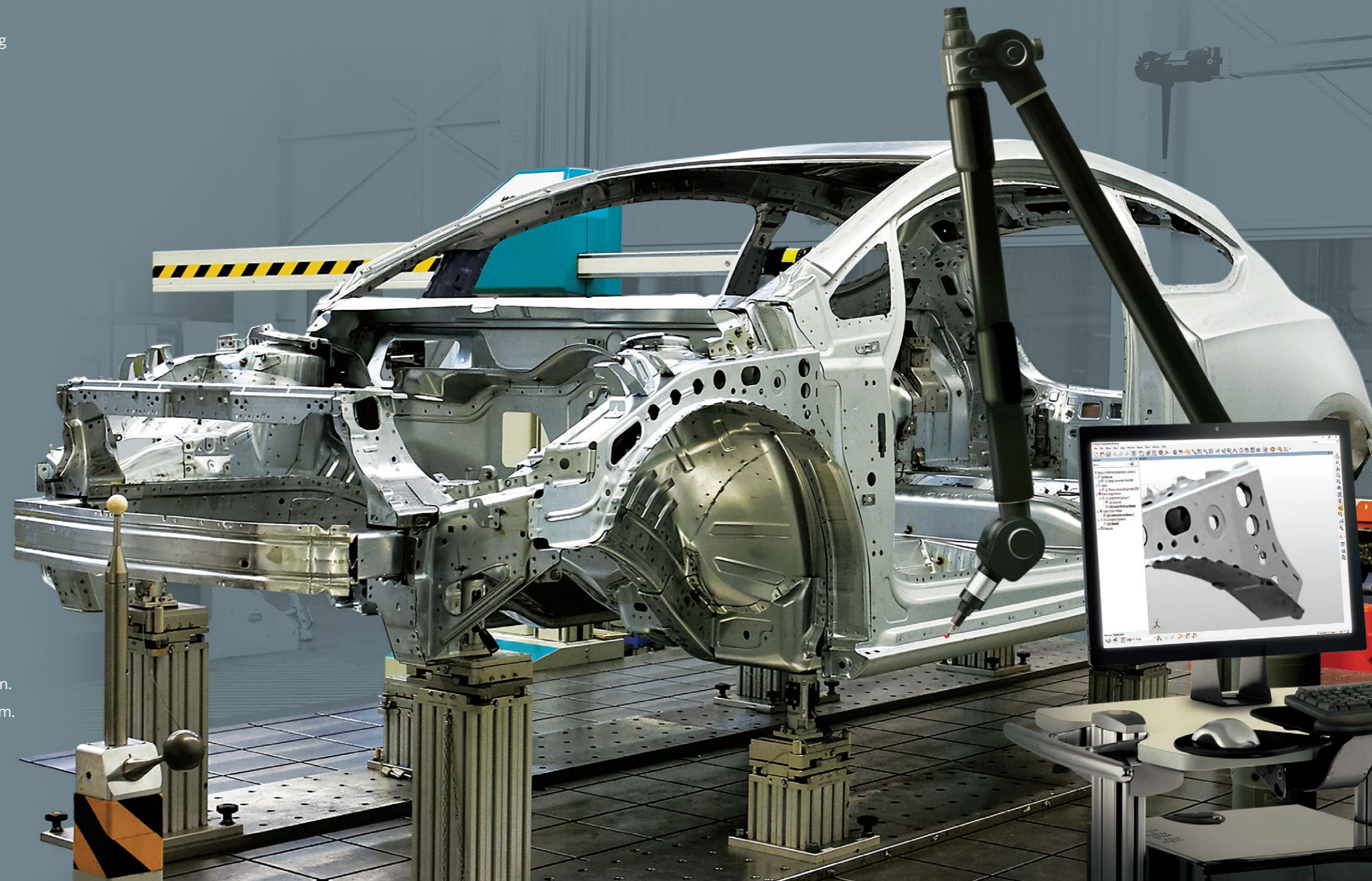
**Extended report capabilities** including customizable report layouts, automatic report generation, and export to Adobe PDF.

**Integrated Statistical Process Control (SPC) toolset.**

**User-friendly macro programming language** for advanced process customization.

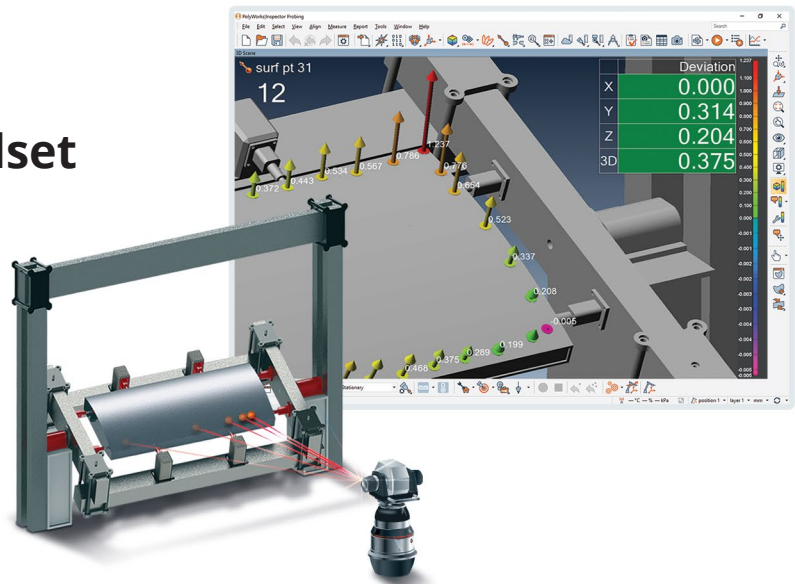
**Total compatibility** with the PolyWorks|Inspector™ point cloud metrology platform.

**Free PolyWorks|Reviewer™** solution to deliver metrology results in 3D to everyone in the organization.



# Offers a complete toolset for large-volume metrology

- Multiple device position alignment by automatic matching of probed targets
- Real-time bundle adjustment
- Device position uncertainty analysis
- Temperature compensation by specifying material and temperature, or by best-fitting targets



## System requirements

### Minimum

Adequate for use when probing with single-point probing devices and using CAD models files that are smaller than 50 MB.

**CPU:** Dual-core CPU

**RAM:** 4 GB

**Graphics cards:** Hardware-accelerated, professional OpenGL graphics card (such as a NVIDIA Quadro series card) equipped with 1 GB of memory

**Operating system:** 64-bit Windows 7, 8.1, or 10, Professional Edition

**Input device:** Two-button mouse with wheel

### Recommended

Covers a broad range of applications, including using large CAD models and laser scanning large parts with a high resolution.

**CPU:** Quad-core CPU

**RAM:** 32 GB

**Graphics card:** NVIDIA Quadro series graphics card equipped with 2 GB of memory

**Operating system:** 64-bit Windows 7, 8.1, or 10, Professional Edition

**Input device:** Two-button mouse with wheel

## Supported probing devices

### Arms

Faro  
Hexagon (Cimcore, Romer)  
Nikon  
Mitutoyo  
Kreon  
Tomelleri-SpaceArms  
RPS Metrology

### Laser trackers

API  
Faro  
Hexagon (Leica)

### Theodolites

TDRA6000

### Optical trackers/ Photogrammetry

Aicon  
Creaform  
Geodetic  
Metronor  
NDI  
Nikon Metrology  
Steinbichler

### Manual CMMs

Deva  
I++  
MZ1060 (Zeiss)  
Renishaw  
Samsort  
Wenzel

## Supported CAD file formats

CATIA V6, V5,  
and V4  
NX (UG)  
Creo (Pro/E)

Inventor  
SolidWorks  
ACIS  
IGES

JT  
Parasolid  
STEP  
VDA-FS

## Supported languages

Chinese (Simplified & Traditional)  
Czech  
English

French  
German  
Hungarian  
Italian  
Japanese

Korean  
Polish  
Portuguese  
Russian  
Spanish

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